

Remarks

In the Office Action dated May 9, 2003, the Examiner rejected claims 1, 3, 6, 7, 9, 12 and 26 under 35 U.S.C. § 102 as being anticipated by U.S. Patent No. 4,574,197 to Kliever (hereinafter Kliever), claims 2, 8 and 30 under 35 U.S.C. § 103 as being unpatentable over Kliever in view of U.S. Patent No. 6,283,598 to Inami (hereinafter Inami), claims 4, 5, 10 and 11 under 35 U.S.C. § 103 as being unpatentable over Kliever in view of U.S. Patent No. 4,737,972 to Schoolman (hereinafter Schoolman '972), claims 13-16 and 27-29 under 35 U.S.C. § 103 as being unpatentable over Kliever, claims 17-19 under 35 U.S.C. § 103 as being unpatentable over Kliever in view of U.S. Patent No. 5,493,595 to Schoolman (hereinafter Schoolman '595), claim 20 under 35 U.S.C. § 103 as being unpatentable over Kliever in view of Schoolman '595 and in further view of U.S. Patent No. 5,448,073 to Jeanguillaume (hereinafter Jeanguillaume), and claims 21-25 under 35 U.S.C. § 103 as being unpatentable over Kliever in view of Jeanguillaume. Claims 31-43 are withdrawn. By this paper, Applicant amends claims 1 and 7. Support for the amendment to claims 1 and 7 can be found, for example, in the specification on page 20, ll. 2-7. As such, no new matter has been added.

With respect to the Examiner's rejections, the Examiner is requested to consider the following remarks.

Independent claim 1 provides a method for high-speed, 3D imaging of optically-invisible radiation, the method comprising detecting optically-invisible radiation within an environment to obtain signals, processing the signals to obtain stereoscopic data, and displaying the stereoscopic data directly to a user's eyes in the form of optically-visible radiation images superimposed on a view of the environment so that the user can obtain a stereoscopic 3D view of the radiation by utilizing natural human stereo imaging processes, where the stereoscopic 3D view does not interfere with the user's view of the environment. Independent claim 7 provides similar recitations in connection with a system. Kliever fails to disclose, teach or suggest the limitations of the presently pending claims and the rejection should be withdrawn.

In particular, contrary to the Examiner's contention, Kliever fails to disclose displaying the stereoscopic data directly to a user's eyes in the form of optically-visible radiation images superimposed on a view of the environment so that the user can obtain a stereoscopic 3D view of the radiation by utilizing natural human stereo imaging processes, where the stereoscopic 3D view does not interfere with the user's view of the environment. The Examiner has mis-characterized the teachings of Kliever. In one embodiment (i.e., the embodiment illustrated in Fig. 2), Kliever discloses an image of a forward view (i.e., a field of view from the forward scene) and range and target information displayed on a display panel. (Kliever, Fig. 2 and col. 3, ll. 10-42). Thus, the embodiment of Kliever illustrated in Fig. 2 fails to provide for displaying the stereoscopic data directly to a user's eyes in the form of optically-visible radiation images superimposed on a view of the environment so that the user can obtain a stereoscopic 3D view of the radiation by utilizing natural human stereo imaging processes, where the stereoscopic 3D view does not interfere with the user's view of the environment.

In another embodiment (i.e., the embodiment illustrated in Fig.3), Kliever discloses a night vision goggle/helmet assembly providing stereoscopic dual field of vision of light corresponding to the right eye view and light corresponding to the left eye view. (Kliever, Fig. 3 and col. 3, ll. 47-67). Thus, the embodiment of Kliever illustrated in Fig. 3 fails to provide for displaying the stereoscopic data directly to a user's eyes in the form of optically-visible radiation images superimposed on a view of the environment so that the user can obtain a stereoscopic 3D view of the radiation by utilizing natural human stereo imaging processes, where the stereoscopic 3D view does not interfere with the user's view of the environment.

Therefore, each of the embodiments of Kliever fails to provide each and every element as set forth in the claim as is required under 35 U.S.C. § 102, and the rejection should be withdrawn.

Furthermore, even if the embodiments of the cited reference, alone or in combination, resulted in the presently pending invention, the Examiner has failed to provide the motivation to combine the teaching of any of the embodiments of Kliever as is required for a *prima facie* case of obviousness under 35 U.S.C. § 103(a). The mere fact that references can be combined or modified, which Applicants do not agree is the case with respect to the cited reference, does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination or modification. (See, MPEP § 2143.01).

In particular, Kliever fails to provide any motivation or suggestion for combination or modification of any of the embodiments illustrated in Figs. 2 and 3 with each other or any other art. To the contrary, Kliever discloses (with respect to the embodiment illustrated in Figure 2), combining the image being observed through the telescopic assembly (10) with the image on the display (60) is particularly useful for providing tank drivers and the like with both a forward view and range information impressed thereupon since the necessity is eliminated for the driver to remove his field of view from the forward scene, which he is observing, in order to obtain range and target information. (Kliever, col. 3, ll. 28-37). As such, Kliever teaches away from the desirability of any combination of the embodiment illustrated in Fig. 2 with another configuration.

Yet furthermore, the embodiment of Kliever illustrated in Fig. 2 implements a combining circuit (66) and a single display (30), while the embodiment of Kliever illustrated in Fig. 3 implements an R/L switch circuit (48') and a pair of displays (92, 94). As such, there is no suggestion or motivation for any combination of the embodiments of Kliever illustrated in Figs. 2 and 3. ("If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious." MPEP § 2143.01, citing *In re Ratti*, 270 F.2d 810, 123 USPQ 349 (CCPA 1959)).

The teaching or suggestion to make the claimed combination must be found in the prior art, not in the applicant's disclosure. (See, MPEP § 2143; see also, *In re*

Dembiczak, 175 F.3d 994, 999 (Fed. Cir. 1999) ("Combining prior art references without evidence of ... suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability—the essence of hindsight.")). An attempt to piece together the Applicants' invention (e.g., piecing together any combination of the embodiments of Kliever with each other or any other reference) would be impermissible hindsight.

Regarding the claims which depend from independent claims 1 and 7, Applicants contend that these claims are patentable for at least the same reasons that claims 1 and 7 are patentable. Moreover, Applicants contend these claims recite further limitations, in addition to the limitations of claims 1 and 7, which render these claims additionally patentable.


In particular, regarding claims 2 and 8, the Examiner asserts that Inami discloses embodiments of a system for projecting images to the right eye and left eye of a user in a HMD to produce a 3-D image. However, the Examiner has mis-characterized the teaching of Inami. Contrary to the Examiner's assertion, Inami teaches projecting images to a screen (11) and to a half-mirror (15). (Inami, Figs. 1 and 5, col. 2, ll. 50-57 and col. 5, ll. 1-20). As such, Inami fails to provide a system for projecting images to the right eye and left eye of a user in a HMD to produce a 3-D image.

Consequently, in view of the above and in the absence of better art, Applicants' attorney respectfully submits the application is in condition for allowance which allowance is respectfully requested. No fee is believed to be due for the filing of this paper. Please charge any additional fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978.

The Examiner is requested to telephone the undersigned to discuss prompt resolution of any remaining issues necessary to place this case in condition for allowance.

Respectfully submitted,

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